An expandable intraluminal endoprosthesis including a tubular member (1) a first diameter which permits intraluminal delivery of the member into a lumen of a body passageway, The tubular member (1) is particularly a blood vessel. capable of acquiring a second, expanded and deformed diameter upon the application from the interior of the tubular member of a radially outwardly extending force, which second diameter is variable and dependent on the amount of the force applied to the tubular member. Such a tubular member may be expanded and deformed to expand the lumen of the body passageway. wall of the tubular member includes a substantially continuous structure (2) of mutually staggered undulations. structure has been separated from a tube wall and exhibits at lest one pattern which advances substantially helically along longitudinal axis of the tubular member. Connection elements within the structure connect adjacent undulations to These connection elements are an integral each other. extension of the undulations thereby interconnected.

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